

Polymer Chemistry

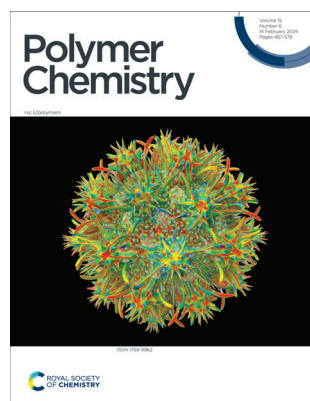
The home for the most innovative and exciting polymer chemistry, with an emphasis on polymer synthesis and applications thereof

rsc.li/polymers

The Royal Society of Chemistry is the world's leading chemistry community. Through our high impact journals and publications we connect the world with the chemical sciences and invest the profits back into the chemistry community.

IN THIS ISSUE

ISSN 1759-9962 CODEN PCOHC2 15(6) 467-578 (2024)



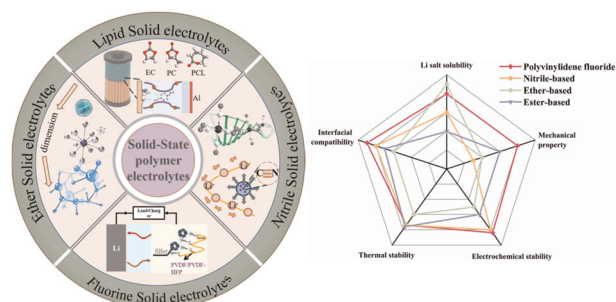
Cover
Image credit: © Getty Images

REVIEW

473

Solid-state polymer electrolytes in lithium batteries: latest progress and perspective

Jingbo Mu, Shimin Liao, Linlin Shi, Bihai Su, Feng Xu, Zengcai Guo,* Hailing Li and Fangfang Wei*

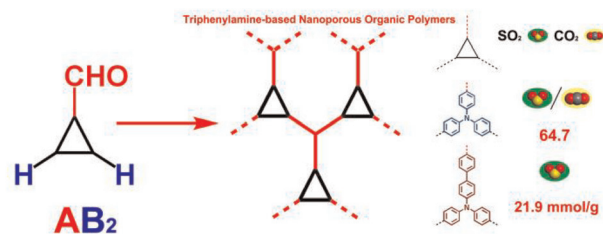


PAPERS

500

Synthesis of triphenylamine-based nanoporous organic polymers for highly efficient capture of SO₂ and CO₂

Jun Yan,* Yan Tan, Sihan Tong, JiangLi Zhu and Zefeng Wang*



RSC Applied Interfaces

GOLD
OPEN
ACCESS

Interfacial and surface research
with an applied focus

Interdisciplinary and open access

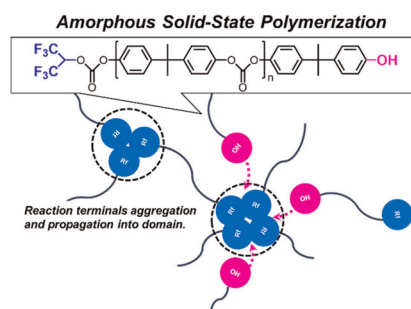
rsc.li/RSCApplInter

Fundamental questions
Elemental answers

508

Fluorine-driven amorphous solid-state polycondensation: phosgene-free synthesis of high-molecular weight polycarbonate from fluorinated carbonate

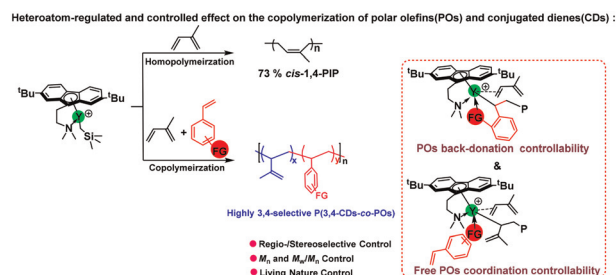
Taihei Taniguchi, Naoko Shirota, Takashi Okazoe,*
Shin-ichi Matsuoka, Katsuhiro Yamamoto and
Masato Suzuki*



516

Polar comonomers regulate and control the copolymerization of conjugated dienes and methoxystyrenes catalyzed by a CGC-type rare-earth metal catalyst

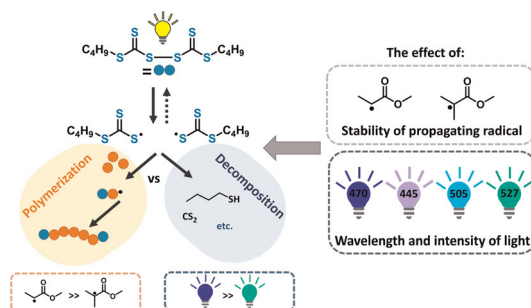
Zhijie Fu, Chuang Song, Yuanxia Qi, Jingting Pei,
Xuanren Zhu, Yanan Zhao,* Yi Luo and Xiaofang Li*



522

Photoiniferter-RAFT polymerization mediated by bis(trithiocarbonate) disulfides

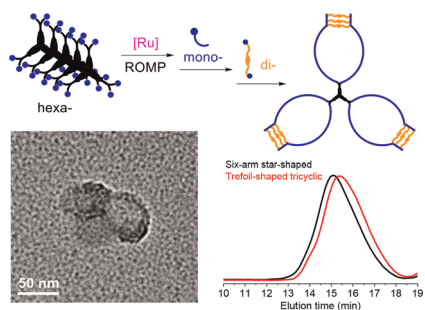
Magdalena A. Beres, Julia Y. Rho, Andrew Kerr,
Timothy Smith and Sébastien Perrier*



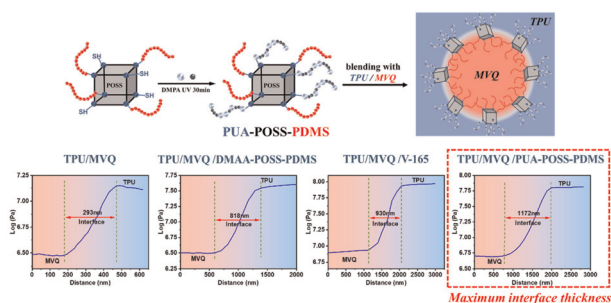
534

Efficient synthesis of trefoil-shaped tricyclic polymers by a ROMP-based blocking-cyclization technique

Hao Wang, Cuihong Ma, Zhiying Han, Xiaojuan Liao,
Ruyi Sun* and Meiran Xie*



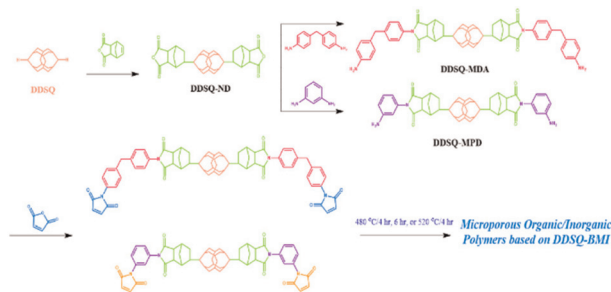
544



A stable amphiphilic hybrid nanoparticle compatibilizer constructed from polyhedral oligomeric silsesquioxane (POSS) for immiscible thermoplastic polyurethane/methyl vinyl silicone elastomer (TPU/MVQ) blends

Fuyue Tian, Jing Hu, Yanyan Song, Nanying Ning, Bing Yu* and Ming Tian*

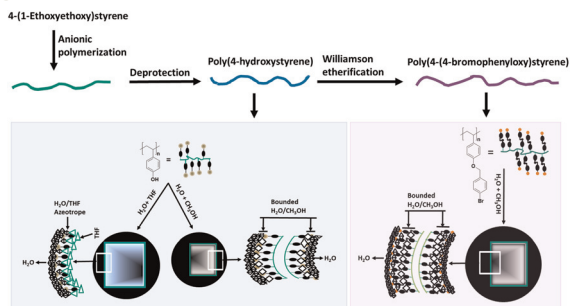
553



Enhanced thermal and porous properties of double-decker-shaped polyhedral silsesquioxane-bismaleimide (DDSQ-BMI) nanocomposites for high-performance CO₂ storage and supercapacitors

Zih-Yu Chen, Wei-Cheng Chen and Shiao-Wei Kuo*

565



Synthesis and self-assembly of the amphiphilic homopolymers poly(4-hydroxystyrene) and poly(4-(4-bromophenoxy)styrene)

Christopher M. Hurley, Mohammad Changez,* Megan E. Johnstone, Hilal Alrahbi, Mohammad Faiyaz Anwar, Dallas Donohoe, Nam-Goo Kang* and Jimmy Mays

